

CLAIMS

1. A method of providing an interactive short messaging service (SMS) from a short messaging service provider (SMP) to a user having a communications device connected to a communications network, the communications device including a keypad or voice activator for establishing communications between it and the SMP and an alphanumeric display device comprising initially:-
 - storing short messages each with a unique identifier for access by the communications device as content short messages (CSM);
 - the SMP stores the unique identifier for a plurality of CSMs in a menu of short messages to provide a short messages menu (SMM) with its own unique identifier;
 - and then on a communications device accessing the SMS, the steps are performed of:-
 - the SMP downloads the SMM to the communications device; and
 - the SMP terminates the call on completion of the downloading.
2. A method as claimed in claim 1 in which the SMP downloads SMMs as often as required until the user terminates the session.
3. A method as claimed in claim 2, in which the unique identifier of the SMM is in turn stored in another SMM with its own unique identifier as a CSM.
4. A method as claimed in claim 2, in which the SMMs are stored in a hierarchical fashion.
5. A method as claimed in claim 2, in which the SMP additionally itself stores and downloads the CSMs.

6. A method as claimed in claim 2, in which at least one CSM is stored separately by a short messaging content provider (SMCP) and the unique identifier includes a contact URL for downloading the CSM from the SMCP.
- 5 7. A method as claimed in claim 1, in which the unique identifier of the SMM is in turn stored in another SMM with its own unique identifier as a CSM.
8. A method as claimed in claim 1, in which the SMMs are stored in a hierarchical fashion.
- 10 9. A method as claimed in claim 1, in which the SMP additionally itself stores and downloads the CSMs.
- 15 10. A method as claimed in claim 1, in which at least one CSM is stored separately by a short messaging content provider (SMCP) and the unique identifier includes a contact URL for downloading the CSM from the SMCP.
- 20 11. A method as claimed in claim 10 in which, on using the contact URL for downloading a CSM from the party storing the CSM, the party identifies the communications device and downloads the information depending on the identity of the communications device.
- 25 12. A method as claimed in claim 10, in which the CSM is only delivered on the communications device sending a unique password identifying a user or class of users.
- 30 13. A method as claimed in claim 10, in which the SMCP is a WAP server and the CSM downloaded allows access to the full WAP services provided through the WAP server.
14. A method as claimed in claim 1, in which, on receiving a request for an SMM, the SMP obtains the location of the communications device from the network operator and the SMP downloads an SMM appropriate to the location of the communications device.

15. A method as claimed in claim 1, in which at least some of the SMMs are provided as a speech message.
- 5 16. A method as claimed in claim 1, in which on the communications device accessing the SMS, the communications device sends an additional instruction whereby all SMMs and CSMs are downloaded as speech messages.
- 10 17. A method as claimed in claim 1, in which the communications device stores a predetermined number of SMMs and as another SMM is loaded, the SMM stored for the longest time is deleted.
18. A method as claimed in claim 1, in which with each SMM downloaded, an
15 additional short message is downloaded.
19. A method as claimed in claim 18, in which the additional short message is an advertising message.
- 20 20. A method as claimed in claim 1, in which, on receiving a short message for storage as a CSM, the steps are performed of:-
- storing the message in a suitable format;
- 25 assigning a label to the message;
- assigning a contact URL for use by the communications device, and
- entering the label and contact URL of the CSM in at least one SMM.
- 30 21. A method as claimed in claim 20, in which the user, on desiring to avail of the SMS, the following steps are performed:-
- the user operates the communications device to contact the SMP by

using the unique identifier of the required SMM;

the SMP answers;

5 the SMP downloads the SMM;

the SMP terminates the call;

10 the user scrolls the SMM;

the user chooses a CSM from the SMM;

the user uses the unique identifier of the required CSM obtained from
the SMM to access the CSM;

15 the CSM is downloaded to the user; and

the call terminates.

20 22. A method as claimed in claim 1, in which the user, on desiring to avail of the
SMS, the following steps are performed:-

the user operates the communications device to contact the SMP by
using the unique identifier of the required SMM;

25 the SMP answers;

the SMP downloads the SMM;

30 the SMP terminates the call;

the user scrolls the SMM;

the user chooses a CSM from the SMM;

the user uses the unique identifier of the required CSM obtained from the SMM to access the CSM;

5 the CSM is downloaded to the user; and

the call terminates.

23. A method as claimed in claim 22, in which, when the CSM downloaded is a
10 further SMM, the unique identifier of the new SMM is downloaded and the steps repeated by the user and SMP until the required CSM is located or the user terminates.

24. A method as claimed in claim 22, in which when the CSM is provided by the
15 SMP, the SMP terminates the call once the CSM is downloaded.

25. A method as claimed in claim 22, in which when the CSM is provided by a
SMCP directly, the call is terminated by the user when the required communication of information has been achieved.

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26. A method as claimed in claim 22, in which:-

the SMP downloads an identifier database to the communications device; and

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the user stores the unique identifier of SMMs and CSMs in the identifier database for subsequent use.

27. A method as claimed in claim 22 in which:-

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the SMP downloads an identifier database to the communications device;

the user stores the unique identifier of SMMs and CSMs in the

identifier database for subsequent use; and

in which when the unique identifier used establishes direct contact with the SMCP, the unique identifier contains a further identifier for the SMP to confirm to the SMP of the contact between user and SMCP.

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28. A method as claimed in claim 22 in which:-

the SMP downloads an identifier database to the communications device;

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the user stores the unique identifier of SMMs and CSMs in the identifier database for subsequent use;

in which when the unique identifier used establishes direct contact with the SMCP, the unique identifier contains a further identifier for the SMP to confirm to the SMP of the contact between user and SMCP; and

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said further identifier is hidden from the user and not displayed again.

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29. A method as claimed in claim 1, in which at least one CSM allows the establishment of direct communications between the user and an interactive voice response system (IVR).

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30. A method as claimed in claim 1, in which at least one CSM allows the establishment of a direct communications link with an identified person or group of persons.

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31. A method of providing an interactive short messaging service (SMS) from a short messaging service provider (SMP) to a user having a communications device connected to a communications network, the communications device including a keypad or voice activator for establishing communications between it and the SMP and an alphanumeric display device comprising

initially:-

storing short messages each with a unique identifier for access by the communications device as content short messages (CSM);

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the SMP stores the unique identifier for a plurality of CSMs in a menu of short messages to provide a short messages menu (SMM) with its own unique identifier;

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the unique identifier of the SMM is stored in another SMM with its own unique identifier as a CSM, the SMMs being stored in hierarchial fashion;

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and then on a communications device accessing the SMS, the steps are performed of:-

the SMP downloads the SMM to the communications device; and

the SMP terminates the call on completion of the downloading.

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32. A method as claimed in claim 31 in which the SMP downloads SMMs as often as required until the user terminates the session.

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33. A method as claimed in claim 31, in which the SMP additionally itself stores and downloads the CSMs.

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34. A method as claimed in claim 31, in which at least one CSM is stored separately by a short messaging content provider (SMCP) and the unique identifier includes a contact URL for downloading the CSM from the SMCP.

35. A method as claimed in claim 34 in which, on using the contact URL for downloading a CSM from the party storing the CSM, the party identifies the communications device and downloads the information depending on the identity of the communications device.

36. A method as claimed in claim 34, in which the CSM is only delivered on the communications device sending a unique password identifying a user or class of users.
- 5 37. A method as claimed in claim 34, in which the SMCP is a WAP server and the CSM downloaded allows access to the full WAP services provided through the WAP server.
- 10 38. A method as claimed in claim 31, in which, on receiving a request for an SMM, the SMP obtains the location of the communications device from the network operator and the SMP downloads an SMM appropriate to the location of the communications device.
- 15 39. A method as claimed in claim 31, in which at least some of the SMMs are provided as a speech message.
- 20 40. A method as claimed in claim 31, in which on the communications device accessing the SMS, the communications device sends an additional instruction whereby all SMMs and CSMs are downloaded as speech messages.
- 25 41. A method as claimed in claim 31, in which the communications device stores a predetermined number of SMMs and as another SMM is loaded, the SMM stored for the longest time is deleted.
- 30 42. A method as claimed in claim 31, in which with each SMM downloaded, an additional short message is downloaded.
43. A method as claimed in claim 42, in which the additional short message is an advertising message.
44. A method as claimed in claim 31, in which, on receiving a short message for storage as a CSM, the steps are performed of:-

storing the message in a suitable format;

assigning a label to the message;

5 assigning a contact URL for use by the communications device, and

entering the label and contact URL of the CSM in at least one SMM.

45. A method as claimed in claim 31, in which the user, on desiring to avail of the
10 SMS, the following steps are performed:-

the user operates the communications device to contact the SMP by
using the unique identifier of the required SMM;

15 the SMP answers;

the SMP downloads the SMM;

20 the SMP terminates the call;

the user scrolls the SMM;

the user chooses a CSM from the SMM;

25 the user uses the unique identifier of the required CSM obtained from
the SMM to access the CSM;

the CSM is downloaded to the user; and

30 the call terminates.

46. A method as claimed in claim 45, in which, when the CSM downloaded is a
further SMM, the unique identifier of the new SMM is downloaded and the
steps repeated by the user and SMP until the required CSM is located or the

user terminates.

47. A method as claimed in claim 45, in which when the CSM is provided by the SMP, the SMP terminates the call once the CSM is downloaded.

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48. A method as claimed in claim 45, in which when the CSM is provided by a SMCP directly, the call is terminated by the user when the required communication of information has been achieved.

- 10 49. A method as claimed in claim 45, in which:-

the SMP downloads an identifier database to the communications device; and

- 15 the user stores the unique identifier of SMMs and CSMs in the identifier database for subsequent use.

50. A method as claimed in claim 45, in which, when the unique identifier used establishes direct contact with the SMCP, the unique identifier contains a further identifier for the SMP to confirm to the SMP of the contact between user and SMCP.
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51. A method as claimed in claim 45 in which:-

- 25 the SMP downloads an identifier database to the communications device;

the user stores the unique identifier of SMMs and CSMs in the identifier database for subsequent use; and

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in which when the unique identifier used establishes direct contact with the SMCP, the unique identifier contains a further identifier for the SMP to confirm to the SMP of the contact between user and SMCP.

52. A method as claimed in claim 45 in which:-

the SMP downloads an identifier database to the communications device;

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the user stores the unique identifier of SMMs and CSMs in the identifier database for subsequent use;

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in which when the unique identifier used establishes direct contact with the SMCP, the unique identifier contains a further identifier for the SMP to confirm to the SMP of the contact between user and SMCP; and

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said further identifier is hidden from the user and not displayed again.

53. A method as claimed in claim 45, in which at least one CSM allows the establishment of a direct communications link with an identified person or group of persons.

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54. A method as claimed in claim 31, in which at least one CSM allows the establishment of direct communications between the user and an interactive voice response system (IVR).

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55. A method as claimed in claim 31, in which at least one CSM allows the establishment of a direct communications link with an identified person or group of persons.

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56. A method of providing an interactive short messaging service (SMS) from a short messaging service provider (SMP) to a user having a communications device connected to a communications network, the communications device including a keypad or voice activator for establishing communications between it and the SMP and an alphanumeric display device comprising initially:-

storing short messages each with a unique identifier for access by the communications device as content short messages (CSM);

5 the SMP stores the unique identifier for a plurality of CSMs in a menu of short messages to provide a short messages menu (SMM) with its own unique identifier;

10 the unique identifier of the SMM is stored in another SMM with its own unique identifier as a CSM, the SMMs being stored in hierarchial fashion;

and then on a communications device accessing the SMS, the steps are performed of:-

15 the SMP downloads the SMM to the communications device;

the SMP terminates the call on completion of the downloading; and

20 the SMP considers the SMM and uses the unique identifier of the CSMs in the SMM to access the required CSM.

57. A method as claimed in claim 56, in which the SMP additionally itself stores and downloads the CSMs.

25 58. A method as claimed in claim 56, in which at least one CSM is stored separately by a short messaging content provider (SMCP) and the unique identifier includes a contact URL for downloading the CSM from the SMCP.

30 59. A method as claimed in claim 57 in which, on using the contact URL for downloading a CSM from the party storing the CSM, the party identifies the communications device and downloads the information depending on the identity of the communications device.

60. A method as claimed in claim 57, in which the CSM is only delivered on the

communications device sending a unique password identifying a user or class of users.

61. A method as claimed in claim 57, in which the SMCP is a WAP server and the CSM downloaded allows access to the full WAP services provided through the WAP server.

62. A method as claimed in claim 57, in which, on receiving a request for an SMM, the SMP obtains the location of the communications device from the network operator and the SMP downloads an SMM appropriate to the location of the communications device.

63. A method as claimed in claim 57, in which on the communications device accessing the SMS, the communications device sends an additional instruction whereby all SMMs and CSMs are downloaded as speech messages.

64. A method as claimed in claim 56, in which, on receiving a short message for storage as a CSM, the steps are performed of:-

storing the message in a suitable format;

assigning a label to the message;

assigning a contact URL for use by the communications device, and

entering the label and contact URL of the CSM in at least one SMM.

65. A method as claimed in claim 56, in which the user, on desiring to avail of the SMS, the following steps are performed:-

the user operates the communications device to contact the SMP by using the unique identifier of the required SMM;

the SMP answers;

the SMP downloads the SMM;

5 the SMP terminates the call;

the user scrolls the SMM;

10 the user chooses a CSM from the SMM;

the user uses the unique identifier of the required CSM obtained from
the SMM to access the CSM;

15 the CSM is downloaded to the user; and

the call terminates.

66. A method as claimed in claim 65, in which, when the CSM downloaded is a
further SMM, the unique identifier of the new SMM is downloaded and the
20 steps repeated by the user and SMP until the required CSM is located or the
user terminates.

67. A method as claimed in claim 65, in which when the CSM is provided by the
SMP, the SMP terminates the call once the CSM is downloaded.

25 68. A method as claimed in claim 65, in which when the CSM is provided by a
SMCP directly, the call is terminated by the user when the required
communication of information has been achieved.

30 69. A method as claimed in claim 65, in which:-

the SMP downloads an identifier database to the communications
device; and

the user stores the unique identifier of SMMs and CSMs in the identifier database for subsequent use.

70. A method as claimed in claim 65 in which:-

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the SMP downloads an identifier database to the communications device;

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the user stores the unique identifier of SMMs and CSMs in the identifier database for subsequent use; and

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in which when the unique identifier used establishes direct contact with the SMCP, the unique identifier contains a further identifier for the SMP to confirm to the SMP of the contact between user and SMCP.

71. A short messaging service system comprising:

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an SMP computer having storage for content short messages (CSMs) and programmed to assign a unique identifier to the CSMs and to store the unique identifiers of a plurality of CSMs in a menu of short messages to provide a short messages menu (SMM) with its own unique identifier;

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a communications device including activation means;

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a communications network connecting the SMP computer and the communications device; and

a computer program for operating the SMP computer on being contacted by the communications device to download a requested SMM to the communications device and to terminate the call when the downloading is completed.

72. A system as claimed in claim 71 in which the activation means is a keypad.

73. A system as claimed in claim 71 in which the activation means is a voice activator.

5 74. A system as claimed in claim 71 comprising a short messaging content provider (SMCP) computer, programmed to store and download a CSM to the communications device.

10 75. A system as claimed in claim 71 in which the SMCP computer is a WAP server.

76. A system as claimed in claim 71 in which the SMCP computer includes means for determining the location of a communications device.

15 77. A system as claimed in claim 71 in which the SMCP computer includes a voice synthesiser to deliver audible messages to the communications device.

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